

### DESCRIPTION

**CEMTEC EPC** is designed as high performance flowable epoxy system to encapsulate pile tops. **CEMTEC EPC** provides excellent bonding to the concrete substrate without the requirement of a primer. **CEMTEC EPC** is compatible with CMCI's range of liquid applied membranes and exhibits excellent water tightness.

### FEATURES & BENEFITS

- Prepacked system offers simple application techniques.
- Excellent adhesion to concrete.
- High initial strength and return to service.
- Stable in deep or thick sections.
- High chemical resistance.
- Offers excellent water tightness as a system.

### BASIC USES

- Pile-top encapsulation
- Repairs to marine structures.
- All high strength applications.

### TECHNICAL INFORMATION

#### Typical Engineering Data

The following results were developed under laboratory conditions

#### Compressive Strength

##### ASTM C-579 50 mm cubes

Age	Strength
24 hours	81 MPa
3 days	85 MPa
7 days	94 MPa

Bond to Concrete : Exceeds tensile and shear strength of concrete

Abrasion Resistance : Greater than concrete.

#### Flexural Strength, ASTM C 580

24 hours	20 MPa
3 days	21 MPa
7 days	24 MPa

#### Tensile Strength, ASTM C 307

1 day	12 MPa
7 days	14 MPa

Gel Time , ASTM D 2471 90 minutes @ 23°C  
Impact Strength : ISO 6272:1993 No indication of cracking was observed, when 450 gm. steel ball was dropped at a height of 1 meter and 2 meters. Impact resistance is greater than that of concrete

### DIRECTIONS FOR USE

#### Pile Surface Preparation

New concrete must be a minimum of 28 days old. The concrete must be clean and rough. All oil, dirt, debris, and unsound concrete must be removed. The surface must be prepared mechanically using a scabber, bush hammer, shotblast or scarifier which will give a surface profile of a minimum 3-mm and expose the structurally sound concrete surface. The final step in cleaning should be the complete removal of all residue with a vacuum cleaner or pressure washing

#### Form Preparation

Forms must be liquid tight to prevent leakage, and they should be strong and well braced. To facilitate stripping, the forms should be coated with two applications of paste wax or each piece wrapped with polythene.

#### Mixing

mix parts A & B (resin & hardener) for 2 minutes using a drill and mixing prop. For ease of mixing add the Part B to the Part A (not the reverse). The epoxy must be well mixed to ensure proper chemical reaction. After the epoxy has been mixed, add the Part C (aggregate) and mix for 2-3 minutes more until the aggregate is completely wetted out. For large jobs, use a mortar mixer for mixing. Place immediately.

#### Placement

Place the grout within its pot life and maintain a consistent flow, so as to completely fill the formwork.

#### Note

Cold temperatures will significantly reduce flow characteristics and will increase the difficulty of placement.

### WATERPROOFING MEMBRANES

The **CEMTEC EPC** shall be lightly abraded to remove all traces of formwork release agents to enhance the adhesion between the epoxy substrate with the subsequent membranes. Membranes shall be tested for its adhesion and compatibility over **CEMTEC EPC** before commencing the application of the job.

### CLEAN-UP

Tools and mixer may be cleaned with **CEMTEC SOLVENT** or ketone solvents.

### PRECAUTIONS & LIMITATIONS

- Wear protective gloves and eye glasses when handling epoxies
- Do not use over frozen concrete
- Store material at room temperature before use
- Solvents used for clean-up are flammable, keep away from heat, sparks, open flame, or lit cigarettes. Use explosion-proof application equipment.

<b>COVERAGE</b>	30 kg kits will yield approximately 0.015m <sup>3</sup> and 20 kg Kits will yeild approximately 0.010m <sup>3</sup> when placed at an average depth of 10mm
<b>PACKAGING</b>	30 & 20 kg kits
<b>COLOR</b>	Available in Dove grey



#### Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no warranty and or responsibility is assumed on the performance of work completion executed with use of our products.

**"High Quality Construction Chemicals"**  
CONSTRUCTION MATERIAL CHEMICAL INDUSTRIES  
P.O. Box 7137, Dammam 31462, Saudi Arabia,  
Tel: 00966-13-8471450; Fax: 00966-13-8471575  
Email: [tech@cmci-sa.com](mailto:tech@cmci-sa.com), Web: [www.cmci-sa.com](http://www.cmci-sa.com)

Scan Here For Download  
Data Sheet

